

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

UNITED STATES OF AMERICA,

v.

SUNG KOOK (BILL) HWANG and  
PATRICK HALLIGAN,

Defendants.

22 Cr. 240 (AKH)

---

**DEFENDANT SUNG KOOK (BILL) HWANG'S REPLY MEMORANDUM  
IN SUPPORT OF HIS MOTION TO EXCLUDE EVIDENCE AND COMPEL  
DISCOVERY ON THE PROSECUTION'S RULE 16 VIOLATION**

---

**TABLE OF CONTENTS**

	<b>Page</b>
TABLE OF AUTHORITIES .....	ii
PRELIMINARY STATEMENT .....	1
ARGUMENT .....	4
I.    The Prosecution’s Recklessness Warrants Preclusion.....	4
II.   The Defense Has Suffered Substantial Prejudice .....	12
III.  The Court Should Order Discovery .....	16
CONCLUSION.....	16

**TABLE OF AUTHORITIES**

**Page(s)**

**Cases**

*United States v. Davis*,  
244 F.3d 666 (8th Cir. 2001) .....5, 6, 11

*United States v. Mason*,  
06 Cr. 80 (NRB), 2008 WL 281970 (S.D.N.Y. Jan. 25, 2008).....5, 6, 11, 15

*United States v. Wicker*,  
848 F.2d 1059 (10th Cir. 1988) .....4, 6, 11

*United States v. Wynder*,  
20 Cr. 470 (PKC), 2022 WL 3572881 (S.D.N.Y. Aug. 19, 2022) .....11

**Other Authorities**

Fed. R. Crim. P. 16(d)(2) .....4

### **PRELIMINARY STATEMENT**

The prosecution has admitted it violated Rule 16, and has further admitted that the Undisclosed Trade Data underlies “meaningful portions of its anticipated expert testimony.” Opp. at 1. Indeed, it has produced to the defense approximately 150 charts based on the Undisclosed Trade Data and disclosed approximately ten separate analyses that rely on the data. But the prosecution continues to ignore the gravity of its 17-month failure to produce the trading records on which it seeks to rely to prove its aggressive open market manipulation charges. Instead, the prosecution tries to minimize the severity of its blatant discovery violation, the extraordinary tactical advantage the prosecution has gained from it, and the extreme prejudice resulting to the defense, all while displaying a cavalier attitude toward the defendants and their right to a fair trial.

First, the substantial prejudice the defense has suffered because of the prosecution’s blatant discovery violation is manifest. In a data-driven case where expert witnesses will feature prominently, the defense’s experts *have not had the data* that the prosecution is now seeking to rely on to prove its case. And that data changes the landscape of the case. It is now clear that the prosecution intends to focus heavily on intraday stock price movements, and their experts intend to connect the intraday stock price movements to Archegos by “matching” the executions in the Undisclosed Trade Data with other market data. Defense experts, by contrast, have had no ability to conduct such an analysis because: (i) they have not had the data showing Archegos’s order modifications throughout the trading day and the timing of those modifications; (ii) they have not had the data showing the “child” order executions and times; and (iii) they have not had the data showing where those orders were routed.

If the prosecution were permitted to use the Undisclosed Trade Data, the defense would now have to conduct complex analyses using the Undisclosed Trade Data, and those analyses

would take many months in the best-case scenario. In addition, the defense would likely need to retain a new expert to testify about whether Archegos's orders affected intraday stock price movements, a connection the prosecution seeks to make based on its experts' extensive analysis of the Undisclosed Trade Data. Delaying the trial so the prosecution can use the Undisclosed Trade Data would benefit the prosecution for its inexcusable Rule 16 violation and be patently unfair to the defendants.

Second, the prosecution's response reveals that prosecutors essentially did nothing in response to the defense's many pleas for trading data. Even if the initial failure to produce the data was a mistake, the prosecutors at minimum acted recklessly and with blind arrogance in repeatedly misrepresenting to the defense that all trade data had been produced without bothering to double-check their productions. The prosecution's suggestion that it had no reason to question the production of the data is disingenuous at best, particularly since defense counsel asked very specific trading data questions, including if there would be "a uniform set of Archegos-related trading data," Estes Decl. Ex. H at 1 (ECF 111-8), which is exactly what the Undisclosed Trade Data appears to be. The prosecution's response provides no explanation for how or why it failed to alert the defense to that data in response to that question or on the many other occasions when it would have been responsive to the questions asked.

Nor does the prosecution's response explain the many times it omitted reference to the Undisclosed Trade Data—in its Rule 17(c) subpoena opposition, in its expert disclosures, and in its exhibit list, *see infra* 9–10—further lulling the defense into believing the data did not exist. Most significantly, and contrary to the prosecution's assertion in its Opposition, its expert disclosures did *not* reference the Undisclosed Trade Data. Indeed, each of the expert disclosures lists the Bates numbers for the "Archegos Order and Execution Records" in Appendix B to the

disclosure, and all of those Bates numbers refer to the previously produced data. *See* Battalio Disclosure, App. B at 2 (ECF 106-1); Seru Disclosure, App. B (ECF 106-2); Taveras Disclosure, App. B (ECF 106-3); and Mason Disclosure, App. B at 1 (ECF 106-4). The prosecution's failure to cite the Undisclosed Trade Data in its expert disclosures, even though it now claims that the Undisclosed Trade Data is necessary for "meaningful portions of its anticipated expert testimony" (Opp. at 1), raises serious questions about the prosecution's good faith, and at minimum, shows a deliberate indifference to fulfilling its disclosure obligations and ensuring the defendants get a fair trial.

Equally troubling is that this was not data the prosecution had somehow lost or misplaced; it was data the prosecution kept on its shared drive and provided to at least two of its expert witnesses, Professor Robert Battalio and Carmen Taveras at the Securities and Exchange Commission ("SEC"). The prosecution conveniently omits *when* it provided its consulting experts, its testifying experts, and the SEC with this data, because that information would undoubtedly highlight the tactical advantage the prosecution has gained from its Rule 16 violation. In any event, it is striking that the prosecution was so focused on the data that it provided it to expert witnesses for complex analyses, but did not bother to confirm its production to the defendants whose liberty is at stake.

All of these facts call into serious question the prosecution's good faith and efforts to comply with its obligations to the defendants and the court. But whether the prosecution acted in bad faith, or merely recklessly, it has demonstrated a repeated pattern of misrepresenting the truth about the trade data productions in this data-driven case, while simultaneously ensuring that its experts were hard at work with the very data that remained undisclosed. The severity of this misconduct and its impact on the defense warrants an equally severe sanction to ameliorate the

prejudice to the defendants, prevent the prosecution from obtaining an unfair advantage, and ensure the misconduct doesn't happen again. Accordingly, the Court should preclude the Undisclosed Trade Data.

### **ARGUMENT**

#### **I. The Prosecution's Recklessness Warrants Preclusion**

The prosecution has certainly changed its tune from its initial letter to the Court. In that January 8, 2024 letter, the prosecution downplayed the importance of the Undisclosed Trade Data by falsely characterizing it as “metadata” and suggesting that it merely “provide[d] further order handling details regarding orders and trading in the tickers reflected in the EMSX Data.” January 8, 2024 Letter (ECF 113). Now the prosecution admits the data is necessary for “meaningful portions of its anticipated expert testimony” (Opp. at 1), and the Jencks Act material produced by the prosecution bears that out. No less than 150 of the prosecution's disclosed charts, based on multiple analyses, rely on the data that was unavailable to the defense. All of this highlights the gravity of the prosecution's Rule 16 violation: not only did it fail to disclose voluminous data, it failed to disclose data that was central to its case, that its experts were actively using.

The prosecution asks the Court to excuse this egregious failure because it was a “mistake.” Opp. at 1. But Rule 16 provides the Court broad discretion to fashion an appropriate remedy for discovery violations, including exclusion of evidence, even when there is no concrete evidence of bad faith. Fed. R. Crim. P. 16(d)(2). Many courts have done so. For example, in *United States v. Wicker*, the Tenth Circuit affirmed the district court's exclusion of a laboratory report reflecting tests performed on materials confiscated from the defendants' room. 848 F.2d 1059 (10th Cir. 1988). Although the district court made no finding that the prosecution had purposefully hidden the report, the Tenth Circuit found that preclusion was appropriate and

emphasized that “[h]ad the government made the least effort to follow up on its request and not neglected its duty under Rule 16(a)(1)(D), a copy would have been delivered to the defendants pursuant to the court’s order.” *Id.* at 1061. The Tenth Circuit further found that “the district court was clearly justified in concluding that the government’s reason was not sufficient to justify the delay.” *Id.*

Similarly, in *United States v. Davis*, the Eighth Circuit affirmed a district court’s exclusion of DNA evidence produced after the prosecution’s “reckless disregard” for its discovery deadline. 244 F.3d 666, 671 (8th Cir. 2001). The Court emphasized that the evidence “was obviously important to the presentation of its case-in-chief” and that the prosecution “could have easily complied with the discovery deadline had it made any effort to check on the status of the DNA testing.” *Id.* In finding prejudice to the defense, the Court further noted that, as is true here, the evidence was “scientific and highly technical in nature,” and thus “would have required thorough investigation by defense counsel, including almost certainly retaining an expert witness or witnesses.” *Id.*

And likewise in *United States v. Mason*—an analogous case which the prosecution spends four paragraphs trying to distinguish—Judge Buchwald excluded evidence that had not been disclosed for 19 months without a finding of bad faith, noting in particular that the prosecution “ignored a specific request for the documents by [defense] counsel” and that delaying the trial would prejudice the defendants for the prosecution’s “eleventh hour effort to change the evidentiary landscape of this case.” 06 Cr. 80 (NRB), 2008 WL 281970, at \*4 (S.D.N.Y. Jan. 25, 2008).

Even putting aside whether the timeline outlined by the prosecution shows bad faith, it certainly illustrates at minimum a reckless indifference to the defense’s discovery requests



similar to the conduct outlined in *Wicker*, *Davis*, and *Mason*. The Opposition describes no steps taken by any prosecutors in response to defense requests about trading data—no efforts to check files, no efforts to check the prosecutors’ shared drive, no efforts to check Relativity. Nor did prosecutors attempt to point the defense to any Bloomberg data they believed was in the production. This failure is particularly troubling in light of the defense’s specific question, on December 22, 2022, “whether there is or will be a uniform set of Archegos-related trading data[.]” Estes Decl. Ex. H (ECF 111-8). The prosecution apparently failed to respond to that email entirely until the defense followed up on January 13, 2023, and then the prosecution never answered the question in follow-up calls with the defense. Without more information and further discovery, it cannot be known whether this was deliberate or negligent. At minimum, it illustrates that the prosecution repeatedly failed to take the defense’s requests and its discovery obligations seriously.

Incredibly, rather than fully accept the consequences of its actions,<sup>1</sup> the prosecution spends much of its Opposition blaming the defense for the prosecution’s Rule 16 failure. For example, the prosecution claims the defense never expressly sought *Bloomberg* trade execution data, as opposed to mere “trading data” (Estes Decl. Ex. D (ECF 111-4)) or a “uniform set of Archegos-related trading data” (Estes Decl. Ex. H (ECF 111-8)). But the defense did not have a crystal ball showing the prosecution failed to produce its complete warrant returns, and the defense had every reason to believe the prosecution did so, because the prosecution’s August 4, 2022 cover letter stated explicitly that the production covered “Responsive Bloomberg Search Warrant Returns (21 Mag 9335).” Estes Decl. Ex. C (ECF 111-3).

---

<sup>1</sup> For the Court’s convenience, a demonstrative timeline of the prosecution’s receipt of the Undisclosed Trade Data, the discussions with the defense over trading data, and filings and disclosures that omitted the Undisclosed Trade Data is attached as Exhibit 1.

Similarly, the prosecution tries to excuse its failings by claiming that the defense's requests for trading data centered on Counterparty trade data, rather than Bloomberg data. Opp. at 10–13, 18–22. But again, this is an effort to blame the defense for not knowing the prosecution had failed in its discovery obligations, and for relying on the prosecution's unequivocal October 24, 2022 representation that it had “provided all trading data currently in its possession” and its similar December 2, 2022 representation that it had “produced to you all the trading data that we obtained.” Estes Decl. Ex. E (ECF 111-5) and Ex. G (ECF 111-7). The defense's prior requests to the government focused on obtaining trade data from counterparties only because the government's production included detailed order and execution-level data for Morgan Stanley, leading the defense to believe the other counterparties may have had the sought-after data on trade execution. But the requests made clear that the defense did not have anything resembling the Undisclosed Trade Data. Defense counsel repeatedly requested data with “order-level transaction times and lots” (Estes Decl. Ex. F at 2 (ECF 111-6); *see also* Estes Decl. Ex. H at 1 (ECF 111-8)), which would have been unnecessary had the defense had the Undisclosed Trade Data. The defense also emphasized that it did not have a “uniform set of Archegos-related trading data,” (Estes Decl. Ex. H (ECF 111-8)), which is precisely what the Undisclosed Trade Data is. These requests should have raised glaring red flags that the defense did not have the Undisclosed Trading Data. In fact, the prosecution's response does not provide any clue as to why they did not point the defense to the Undisclosed Trade Data they purportedly believed had been produced in response to any of these inquiries.

Defense counsel also expressed confusion over the market data that had been provided in discovery no less than three times. *See* Estes Decl. Ex. F at 2 (ECF 111-6) (noting that the market data “is essentially meaningless”); Estes Decl. Ex. H at 1 (ECF 111-8) (noting that the

market data is “essentially useless to us”); and Estes Decl. Ex. K at 2 (ECF 111-11) (noting that the defense was having trouble “deciphering this data”). We now know the purpose of this market data: it was used in the “matching analysis” the prosecution experts conducted with the Undisclosed Trade Data. But the prosecution did not tell this to the defense despite the many questions raised; nor did the defense’s questions on market data lead the prosecution to check as to whether the defense had the execution-level data contained in the Undisclosed Trading Data, which would make the market data decipherable.

All of this raises serious questions. Did the prosecution purposefully intend to obfuscate that the market data was part of a matching analysis? When responding to the defense’s requests for Counterparty trade data, did the prosecution purposefully intend to conceal that the sought-after data was found in the Undisclosed Trade Data? Did the prosecution undertake any efforts to check its productions after the defense’s many requests for trading data? Did the prosecution undertake any efforts to confirm the accuracy of its representations that all trading data had been produced? How is it that the prosecution took enough care with this data to produce it to its consulting experts,<sup>2</sup> testifying experts, the SEC, and potentially others, but failed to produce it to the defense?

Under these circumstances, it is hard to believe that the prosecution “took the defendants’ requests” or their discovery obligations “seriously.” Opp. at 12, 16. Had the prosecution not taken such a cavalier approach to its discovery obligations and the defendants’ repeated requests, it could have confirmed what had been produced and told the defense there was no reason to seek Counterparty records because the trade execution data already existed. The Undisclosed

---

<sup>2</sup> The prosecution’s Jencks Act material reflects that it is working with at least two expert consulting firms, Integra and Berkeley Research Group (“BRG”).

Trade Data has not been sitting, unused, in an unmarked box in a warehouse: it was in the prosecution's electronic case file, Opp. at 8, and the prosecution's consulting experts have likely been working with this data for years, given the centrality of the data to the prosecution's expert analyses and that the government's "vendor"<sup>3</sup> made more user-friendly derivative files as far back as November 2021. *See* Opp. at 6–7.

The prosecution should be held accountable for its repeated statements that misled the defense, and it should not be permitted to have a tremendous advantage at trial because of its wrongful actions. As outlined above, the prosecution twice represented to the defense in 2022 that it had disclosed all trading data in its possession. And their misleading statements on trading data continued in 2023. For example, in the prosecution's opposition to the defense's Motion for Rule 17(c) Subpoenas, it represented that it had "obtained trading records from Archegos itself and from Archegos's fund administrator, Citco, as well as trade data from the New York Stock Exchange and NASDAQ," but omitted any mention of the Undisclosed Trade Data. Opp. to Motion for Rule 17(c) Subpoenas at 8 (ECF 84).

The prosecution's expert disclosures likewise omit any citation to the Undisclosed Trade Data. *See* Disclosure of Robert Battalio (Estes Decl. Ex. A (ECF 106-1)); Disclosure of Carmen Taveras (Estes Decl. Ex. C (ECF 106-3)). The prosecution claims in its brief that the expert disclosures "referenced the Bloomberg EMSX data" (Opp. at 13), but that is demonstrably false. Battalio's disclosure explains that he relied on "Archegos Order and Execution Records," which refer to Archegos's trade blotter, Archegos's daily combo sheets, and the Archegos order information captured by EMSX, the Bloomberg order execution management system. Battalio

---

<sup>3</sup> The prosecution has left the details of this "vendor" purposefully vague, but we respectfully submit the Court should confirm whether it was one of the prosecution's two expert consulting firms, Integra or BRG.

Disclosure at 1–2 (ECF 106-1). While this line contains a reference to Bloomberg, the Archegos Trade Data previously produced *was* “Archegos order information captured by EMSX, the Bloomberg order execution management system,” and accordingly, the defense had no reason to believe this data was anything other than data that had been previously produced. More significantly, Appendix B to Battalio’s disclosure and the disclosures of Seru, Taveras, and Mason lists the Bates numbers that comprise the “Archegos Order and Execution Records,” and those Bates numbers consist of the Archegos Trade Data that *was previously produced*. See Battalio Disclosure, App. B at 2 (ECF 106-1); Seru Disclosure, App. B (ECF 106-2); Taveras Disclosure, App. B (ECF 106-3); and Mason Disclosure, App. B at 1 (ECF 106-4). In other words, the expert disclosures reaffirmed the defense’s understanding that no other trade data existed, because no other trade data was cited by Bates number in the disclosures.

The government also omitted any reference to the Undisclosed Trade Data in its exhibit list provided to the defense on December 19, 2023. See Supplemental Declaration of Jordan Estes (“Suppl. Estes Decl.”) ¶ 3.

Again, these omissions raise serious questions as to the prosecution’s good faith. Did the prosecution purposefully avoid referencing the Undisclosed Trade Data in its Rule 17(c) opposition? Did the prosecution purposefully avoid citing the Undisclosed Trade Data in its expert disclosures? Did the prosecution purposefully avoid putting the Undisclosed Trade Data on its December 19 exhibit list?

For prosecutors quick to judge criminal defendants for omitting information, it is quite striking that they now ask the Court to entirely excuse their own misleading and unexplainable omissions. These omissions, along with the prosecution’s earlier misstatements, gaslighted the

defense into believing no additional trading data existed, leading the defense to prepare for an entirely different trial than the one that now appears to be focused on intraday trading data.

The prosecution's misconduct is all the more troubling in light of the recent discovery issues the USAO has faced, including issues that were percolating as the prosecutors were carrying out their discovery obligations in this case. The prosecution's response notably fails to grapple with Judge Castel's decision in *United States v. Wynder*, which involved similar, but less egregious, conduct. There, the prosecution produced hundreds of thousands of documents weeks before trial and attributed its discovery failures to failures of a paralegal and issues with Relativity. *United States v. Wynder*, 20 Cr. 470 (PKC), 2022 WL 3572881, at \*1 and \*3 n.4 (S.D.N.Y. Aug. 19, 2022). Judge Castel adjourned the trial by nearly eight months (*id.* at \*5 n. 9) and, in doing so, noted the "naive attitude on the part of the line prosecutors that all that should be done by paralegals and others was done and that they bear a very limited oversight role." *Id.* at \*1. In response, on October 16, 2022, the Chief of the Criminal Division wrote Judge Castel to let the Court know that the Office was improving tracking systems and training to allow AUSAs to maintain better oversight of the discovery process, and holding unit meetings to discuss Judge Castel's opinion "and the lessons embedded within it." October 16, 2022 Letter, 20 Cr. 470 (PKC) (ECF 160).

In this case, the prosecution's first misrepresentation to the defense on trading data came on October 24, 2022, just days after the Criminal Division Chief's letter to Judge Castel. Estes Decl. Ex. E (ECF 111-5). Evidently, Judge Castel's decision and "the lessons embedded within it" were not enough to deter the prosecution's Rule 16 violation and related misrepresentations. The stronger sanction of preclusion of evidence is needed to deter future misconduct. *See Wicker*, 848 F.2d at 1062; *Davis*, 244 F.3d at 672-73; *Mason*, 2008 WL 2819701, at \*4.

## II. The Defense Has Suffered Substantial Prejudice

The prosecution's suggestion that the defense has received the Undisclosed Trade Data in sufficient time to make use of it at trial borders on the offensive and raises even more questions about the prosecutors' good faith. From the beginning, this case has been about expert witnesses. *See* Sept. 8, 2022 Transcript at 3 (ECF 40) (asking for a trial date "because the trial in this case will likely take close to two months on account of expert testimony and lots of witnesses"). But for 17 months, defense experts have not had the relevant data. The prosecution's experts, in contrast, have conducted at least ten analyses based on the new evidence, and they have transformed those analyses into at least 150 charts. *See* Suppl. Estes Decl. Exs. N–O. Specifically, the prosecution's Jencks Act material for Professor Battalio lists the Undisclosed Trade Data as a data source for: (i) the Vector Auto Regression ("VAR") analysis; (ii) the probit and order change analysis; (iii) the midpoint price change analysis; (iv) the implementation shortfall analysis; (v) the realized spread analysis; (vi) the algorithm and exchange analysis; and (vii) an analysis on size and aggressiveness of trades. *See* Suppl. Estes Decl. Ex. N. The prosecution's Jencks Act material for Carmen Taveras similarly lists the Undisclosed Trade data as the source material for three analyses performed by Taveras. *See* Suppl. Estes Decl. Ex. O. Without this data, defense experts have been unable to conduct any similar analyses, and until January 5, they had no ability to evaluate the prosecution's expert analyses at all.

More fundamentally, the Undisclosed Trade Data has changed the landscape of the case into one focused on short-term price impact. Without this data, the defense and defense experts focused their trial preparation on the theory outlined in the Indictment that Archegos dominated and controlled the prices of these stocks over time. Indictment ¶¶ 4, 27. And the defense had good reason to believe that was the proper focus. Mr. Hwang relied on Archegos's traders to

execute these orders, and he relied on Archegos's traders to provide him with information about the order executions, as reflected in the prosecution's exhibits. *See* Thomas Decl. Exs. A and B (ECF 119-1 and 119-2).

If the prosecution were permitted to use the Undisclosed Trade Data, the defense and its experts would need to undertake extremely time-consuming data-crunching work for each trade at issue to address the Undisclosed Trade Data that went unproduced for 17 months. The defense would likely need to retain a new expert on intraday trading to analyze and testify about the Undisclosed Trade Data, and the process of finding that expert, analyzing the data, and preparing the expert's work will take many months in the best-case scenario. In particular, defense's current experts have advised that they would need to perform a substantial amount of analysis using the new data. They would need to evaluate which of their analyses could be redone with the new, detailed execution data and perform new analyses that were not possible using the previously produced trade data. The work they expect to undertake with the new data would require many different steps to accomplish, as did their initial work, which has been under way for over a year. In particular, they would need to perform new analyses, including their own "matching" analysis, analyses of price impact and reversion, analyses of the techniques Archegos and their counterparties used to limit the price impact of their trading, and volume analyses during times the counterparties' trades were executed.

Had the prosecution provided the Undisclosed Trade Data 17 months ago, the defense's experts would have been able to conduct analyses sufficient to properly evaluate the prosecution's expert disclosures for cross-examination and potential rebuttal expert testimony. But without that year and a half head start, defense experts would need many months to analyze the "matching" analysis performed by the prosecution's experts and relied upon in many of their



analyses, and the resulting 150 charts based on this analysis. Properly analyzing the data would require a tremendous amount of work given the millions of trade executions at issue, which were recorded by the millisecond.

Our experts conservatively estimate that they would need at least six months to do all the work necessary to analyze the data, to test and challenge the work done by the prosecution experts for the past two years, and to present the affirmative arguments that the data supports. And that would only be possible if the prosecution stopped hiding the ball about what it intends to present through its experts and analyses. It is also possible it would take longer than six months, depending on what the experts actually discover when analyzing the extensive new information in the Undisclosed Trade Data.

Finally, if the Undisclosed Trade Data were permitted, the late production adds an enormous amount of work for the defense to plan its cross-examination of the Archegos traders the prosecution plans to call as witnesses. It is not, as the prosecution suggests, as simple as feeding the data “into models used by an expert.” Opp. at 27. As reflected in the Instant Bloomberg Messages previously produced, Mr. Hwang would typically provide instructions to Archegos’s traders regarding swap orders, though he would often give the Archegos traders substantial discretion in how they executed those orders. The new data reflects how those traders, and the counterparties, actually executed the swap orders. If the prosecution were permitted to rely on this new data, the defense would need to compare Mr. Hwang’s instructions to the actual execution data to determine what the data actually shows and then identify appropriate lines of cross-examination for the prosecution’s trader witnesses.

The prosecution’s efforts to downplay the importance of this data, and the resulting prejudice, are entirely inconsistent with its refusal to give it up. First, the prosecution suggests

the defense could have evaluated the timing of orders in other ways: through Mr. Hwang's chat messages, through incomplete Counterparty data, and through the Archegos Trade Data without timestamped order and execution-level detail. *See* Opp. at 26. But if the information is really available elsewhere, the prosecution should be willing to forego the Undisclosed Trade Data and instead use the other documents. If the defense experts could really have undertaken this analysis using other documents, their experts should be forced to do the same. But the prosecutors' refusal to give up the data proves the point: it is central to their expert analysis, it was not otherwise produced, and the defense has been greatly prejudiced because of their failure to produce it.<sup>4</sup>

At bottom, it would take many months, if not more, for the defense to redo the expert work that was previously done and then do the additional work that the defense was unable to do because of the absence of the Undisclosed Trade Data. But Bill Hwang has already spent an incredible amount of money and other resources to prepare for this trial, and since the beginning of the prosecution's highly-publicized investigation, he has faced severe personal, business, and reputational harm. The prosecution's "eleventh hour effort to change the evidentiary landscape of this case...should not be remedied by a scheduling change" that prejudices defendants, defense counsel, and the Court. *Mason*, 2008 WL 281980, at \*4.

---

<sup>4</sup> The prosecution also attempts to downplay the importance of the Undisclosed Trade Data by asserting that the relevant data "totals about 4.4 gigabytes of data—less than a third of the number put forth by the defense." Opp. at 2. However, even if the relevant data is 4.4 gigabytes, that is over 500 times as large as the Archegos Trade Data the defense had before January 5 (which was approximately 7.5 megabytes). In addition, the prosecution calculates 4.4 gigabytes by assuming the defense can simply ignore one of the two files the prosecution produced (i.e. either -0003 or -0004). But these files differ, and the prosecution had not explained how to reconcile them when the Motion to Exclude was filed, nor had the defense's experts been able to reconcile the million of rows of new data.

### III. The Court Should Order Discovery

Finally, the Court should order discovery into the prosecution's Rule 16 violation. The prosecution's primary defense to preclusion is "good faith," but as illustrated above, *see supra* 4-11, the prosecution's factual chronology does not evince "good faith," but rather, raises more questions as to the prosecution's misstatements and omissions. And the prosecution's selective production of one internal communication only highlights that all of the prosecutions' internal communications about the Undisclosed Trading Data should be produced, including all internal communications regarding the defense requests for trading data, all communications relevant to the prosecutions' failure to reference it or disclose its existence, and all communications related to the recent disclosure of the data to the defense. Only with additional inquiry can the Court determine whether even more severe sanctions than preclusion are warranted.

### CONCLUSION

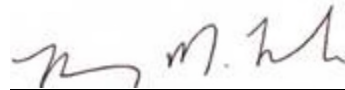
For the above-stated reasons, the Court should (i) preclude the prosecution from offering or using the Undisclosed Trade Data; and (ii) order discovery to determine whether further sanctions or remedial measures are warranted.

Dated: January 15, 2024

Respectfully submitted,

KRAMER LEVIN NAFTALIS &  
FRANKEL LLP

By:




---

Barry H. Berke  
Dani R. James  
Jordan Estes  
1177 Avenue of the Americas  
New York, New York 10036  
(212) 715-9100  
bberke@kramerlevin.com

*Attorneys for Defendant Sung Kook (Bill) Hwang*